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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/706,747	11/07/2000	Suranjan Panigrahi	6564	8482
20322	7590	01/26/2004	EXAMINER	
SNELL & WILMER ONE ARIZONA CENTER 400 EAST VAN BUREN PHOENIX, AZ 850040001			VO, HIEN XUAN	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 01/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/706,747	Applicant(s) PANIGRAHI ET AL.	
	Examiner Hien X. Vo	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-43 is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>11/07/00</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 01/16/2002. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-10 and 14-19 rejected under 35 U.S.C. 102(e) as being anticipated by Mayes (U.S. Patent No. 6,100,526).

With respect to claim 1, Mayes discloses a grain quality monitor including a device for forming a stream of the agricultural product (see e.g. Fig.1); an optical sensing window in the device for passing the stream of the agricultural product (see e.g. Fig. 1, item 12); a radiation source for irradiating the stream of the agricultural product as the stream of the agricultural product passes through the optical sensing window

(see e.g. col. 3, lines 34-40); a receiver for receiving radiation transmitted through the stream of the agricultural product and for converting the received radiation into a corresponding electrical signal (see e.g. col. 4, lines 37-50); and a computer, coupled to the receiver, for receiving the electrical signal and for processing the electrical signal to generate data for use in determining a constituent content of the agricultural product (see e.g. col. 4, lines 50-58).

With respect to claims 2-4, Mayes discloses the invention as claimed including a fiber optic cable (see e.g. Fig.1, item 26), a sensor head for receiving the radiation transmitted through the stream of the agricultural product and for focusing the received radiation onto the fiber optic cable (see e.g. col. 4, lines 25-30), a spectrometer coupled to the fiber optic cable for converting the received radiation into the corresponding electrical signal (see e.g. col. 6, lines 27-55), the fiber optic cable comprises a single fiber optic cable and a fiber optic probe coupled to the fiber optic cable (see Fig.1, items 20, 26, 28); and a plurality of optical lenses positioned between the optical sensing window and the fiber optic cable for focusing the received radiation onto the fiber optic probe (see e.g. col. 2, lines 48-52).

With respect to claims 5-9, Mayes discloses the invention as claimed including a housing for containing the device, the radiation source, the optical sensing window, and the receiver (see Fig. 1), a fan mounted within the housing (see e.g. col. 6, lines 60-65). an inlet, coupled to the device, for attachment to a source providing the agricultural product (see e.g. Fig.1, item 15), the inlet is configured to receive the agricultural

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product from a combine (see e.g. col.4, lines 1-6), the device receives the agricultural product from a grain pipe (see e.g. col. 3, lines 35-40).

With respect to claim 10, Mayes discloses the invention as claimed that the optical sensing window includes an inner wall; an outer wall; and a pair of side walls, wherein the inner wall, the outer wall, and the pair of side walls are joined to form a passageway for the agricultural product (see e.g. Fig. 1, col. 3, lines 58-67 and col. 4, lines 1-6), the inner wall is formed from an optically transparent material (see e.g. col. 3, lines 60-65); and the outer wall and the pair of side walls are formed from an opaque material (see Fig. 1).

Claims 14-19 are method claims corresponding to apparatus claims 1-9.

Therefore, claims 14-19 are rejected for the same rationales set forth for claims 1-9.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12-13 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Mayes (U.S. Patent No. 6,100,526) and further in view of Shields (U.S. Patent No. 5,241,178).

With respect to claims 12-13 and 20, Mayes discloses the invention as claimed including the inner wall with front planar section (see Figs.1 and 2A) except for teaching a pair of curved edges and the outer wall includes a transparent aperture for permitting the radiation to pass through the stream of the agricultural product and to the receiver, and including receiving the agricultural product from a grain pipe. However, Shields discloses the infrared grain analyzer with controllable measurement wavelength that includes a pair of curved edges and the outer wall includes a transparent aperture for permitting the radiation to pass through the stream of the agricultural product and to the receiver and the receiving the agricultural product from a grain pipe (see Fig.1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shields in the system of Myes to provide apparatus for analysis of grain, that is of compact, economical construction and that provides rapid material analysis with minimum operator and accuracy measurement.

Allowable Subject Matter

6. Claims 21-43 allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien X. Vo whose telephone number is (703) 308-5253. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Hien Vo
January 8, 2004


John Barlow
Supervisory Patent Examiner
Technology Center 2800